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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,534	09/24/2004	Jih-Chen Yeh	13708-US-PA	5533
31561	7590	09/26/2007	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE			KALAFUT, STEPHEN J	
7 FLOOR-1, NO. 100			ART UNIT	PAPER NUMBER
ROOSEVELT ROAD, SECTION 2			1745	
TAIPEI, 100			NOTIFICATION DATE	
TAIWAN			DELIVERY MODE	
			09/26/2007	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

Office Action Summary	Application No.	Applicant(s)	
	10/711,534	YEH, JIH-CHEN	
	Examiner	Art Unit	
	Stephen J. Kalafut	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 September 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 24 Sept 2004.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

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Claims 1-16 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims are confusing because they recite that the battery cathode is connected to the negative circuit board contact or that the battery anode is connected to the positive circuit board contact. This is the reverse of the U.S. standard for battery terminology, in which the anode and its contacts are defined as negative, and the cathode and its contacts are defined as positive. Claim 15 is additionally confusing because it recites that the protrusion of the battery cap is engaged in a circular groove of the ring, but the antecedent recitation of “the protrusion” in claim 13 is the “downward protrusion” in the spring tab on the top of the cap. The term “step fitting covering” in claim 19 is unclear. Is this a “step” that fits and covers the cathode, or a “step fitting” that covers the cathode?

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 9, 11 and 17-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Motoyoshi (US 4,218,522).

Motoyoshi discloses a battery holder mounting a battery (B) to a printed circuit board (3), which comprises an electrode plate (12) that would have some resiliency, a ring (11) surrounding the plate (figure 6) and accommodating the battery therein (figure 3), and a battery cap (10) that is fastened to and electrically connected to the ring. The plate (12) and ring form contacts with the battery, and are connected to respective contacts on the circuit board, such as a conductive pattern (17). Due to the confusion noted above, either contact could be the positive, with the other being negative. Thus, claims 1 and 9 and would be met by Motoyoshi, to the extent they are understood. At best, determining which contact should be positive or negative would be within the skill of the ordinary artisan, familiar with the structure of the battery to be placed in the holder. Claims 1 and 9 would thus be at best obvious over Motoyoshi. Claims 2, 9 and 17 recite that the electrode plate and/or ring is soldered to the respective contacts on the circuit board. This would not distinguish because it is a recitation of how the connection was made, and is treated under product-by-process practice, where the claim is evaluated for the characteristics of the product, rather than the process steps. See MPEP 2113 and the cases cited therein. At best, the use of solder to make electrical connections is well known in the electrical arts, and would thus be an obvious expedient to the ordinary artisan. Claim 18 recites both the soldered connections (via its parent claim 17) and the anode and cathode contacting the plate and ring, and would thus be either anticipated or obvious for both of the reasons stated above. As seen in figure 3, the cap engages the outer periphery of the ring, and includes a protrusion (10a) that

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engages an outer groove in the ring. Ring also has a top (10b) that would be a step fitting, to the extent that the term is understood, which covers the top of the battery, and thus the cathode.

Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoyoshi in view of Frantz *et al.* (US 5,980,309).

These claims differ from Motoyoshi by reciting a "feet", which will be understood as "a foot", and a flexible arm extending upwardly therefrom, or a plurality of such feet and arms. Frantz *et al.* disclose a battery holder that includes feet (90) and upwardly extending arms (92), as part of a battery contact (84). Because these help to maintain the battery in position (column 2, lines 27-29), it would be obvious to use the feet and arms of Frantz *et al.* in the lower contact of Motoyoshi.

Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoyoshi in view of Wever *et al.* (US 5,805,423).

These claims differ from Motoyoshi by reciting a spring tab extending toward the center of the battery cap, engaging the cathode of the battery. Wever *et al.* discloses a battery holder with a spring tab (18) that engages the top of a battery (4) near its center. Because of the additional mechanical stability provided by this arrangement, it would be obvious to add a spring tab as shown by Wever *et al.* to the battery holding ring of Motoyoshi. As noted above, determining which of the two battery electrodes would contact the cap would be within the skill of the artisan.

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Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motoyoshi in view of Wever *et al.* as applied to claim 7 above, and further in view of Palmer *et al.* (US 5,851,691).

The above combination does not disclose a protrusion on the spring tab. Palmer *et al.* discloses a protrusion (26) on a battery holder, which serve as a contact (column 2, lines 34-36). Because this protrusion would concentrate the contacting force, it would be obvious to use a protrusion as shown by Palmer *et al.* on the spring tab of Wever *et al.* on the cap of Motoyoshi.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motoyoshi in view of Frantz *et al.* as applied to claim 12 above, and further in view of Wever *et al.*

The combination of Motoyoshi and Frantz *et al.* does not teach a spring tab extending toward the center of the battery cap, engaging the cathode of the battery. Wever *et al.* discloses a battery holder with a spring tab (18) that engages the top of a battery (4) near its center. Because of the additional mechanical stability provided by this arrangement, it would be obvious to add a spring tab as shown by Wever *et al.* to the battery holding ring of Motoyoshi, also modified by using the contact with feet and arms disclosed by Frantz *et al.*

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motoyoshi in view of Yasuda *et al.* (US 4,501,805).

While the cap of Motoyoshi has a downwardly extending portion that would form a step with the top of the cap, such as step covering the battery and any step thereon, this claim differs by reciting that the battery has insulation between the anode and cathode, where a step is defined beside the insulation. Yasuda *et al.* disclose a step (figure 2) shown beside insulation (16)

between the two outer contacts (2, 6) of a battery. Because this is a button-shaped cell, which is the type of cell mounted in the device of Motoyoshi, it would be obvious to use the cell of Yasuda *et al.*, with its stepped shape and insulation, in the holder of Motoyoshi.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motoyoshi in view of Frantz *et al.* and Wever *et al.* as applied to claim 13 above, and further in view of Yasuda *et al.*

The above combination does not teach that the battery has insulation between the anode and cathode, where a step is defined beside the insulation. Yasuda *et al.* disclose a step (figure 2) shown beside insulation (16) between the two outer contacts (2, 6) of a battery. Because this is a button-shaped cell, which is the type of cell mounted in the device of Motoyoshi, it would be obvious to use the cell of Yasuda *et al.*, with its stepped shape and insulation, in the holder of Motoyoshi, also modified by using the spring tab of Wever *et al.* and the contact with feet and arms disclosed by Frantz *et al.*

Claim 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. This claim recites that the step on the battery cap fittingly covers a step on the cathode of the battery, which arrangement is not taught by the prior art. Claims 15 and 16 are so confusing as to preclude an evaluation of their subject matter.

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Claim 3 is objected to because of the following informalities: The term "a feet" should be "a foot", since only one foot appears to be intended. Appropriate correction is required.

The disclosure is objected to because of the following informalities: The specification also contains the incorrect notation of the anode being positive and cathode being negative. For example, see Para 6 on page 2 and Para 26 on page 6. Appropriate correction is required.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chien (US 6,603,670), Okumura *et al.* (JP 11-165,745) and Kubokawa (JP 2000-149,898) disclose various battery holders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sjk



STEPHEN KALAFUT
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GROUP 1700